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July 5, 2006

Marlene H. Dortch, Secretary
Federal Communications Commission
Portals II, Filing Center, TW-A325
Washington, D.C. 20554

Re: Board of Trustees of
Northern Michigan University (FRN 0002-7357-51)
Station WNMU-DT, Marquette MI Facility. ID #4318
Request for Permanent Waiver of the
Replication/Maximization Interference Protection Deadline

Dear Ms. Dortch

For good cause shown, in accordance with the procedures set forth in *Public Notice, DA 06-1255 (DTV Channel Election Issues),* released June 14, 2006, this letter respectfully requests, on behalf of our client, the Board of Trustees of Northern Michigan University ("NMU"), permittee of Noncommercial Educational Television Station WNMU-DT, Marquette, Michigan, a permanent waiver of the July 1, 2006 replication/maximization interference protection deadline established by the Commission in Paragraph 78 of the *Second DTV Periodic Review Report and Order*, 19 FCC Rcd 18279 (2004).[1]

The grounds for this waiver request are severe financial constraints that will not be remedied before the DTV transition date of February 17, 2009 and that are clearly beyond NMU's control. As NMU will now demonstrate, WNMU-DT is currently fiscally unable to satisfy the Paragraph 78 requirement of providing over-the-air service to at least 80% of the number of viewers served by WNMU-TV's 1997 analog facilities and will be unable to do so until it moves to its permanent DTV facilities at WNMU-TV's current analog transmitter site in late 2008. At that time, WNMU-DT will fully replicate WNMU-TV's 1997 analog facilities. NMU's simple plea in this waiver request is that WNMU-DT's financial inability to achieve 80% replication until it moves to its final DTV transmitter site in late 2008 should not cause it to lose its replication/maximization interference protection in 2006. Hence, a permanent waiver of the protection deadline is being requested herein, instead of only a six-month waiver.

[1] By Public Notice, DA 06-1372, released June 29, 2006, the Commission extended the filing deadline in this matter to July 7, 2006.

I. Sociological and Economic Background

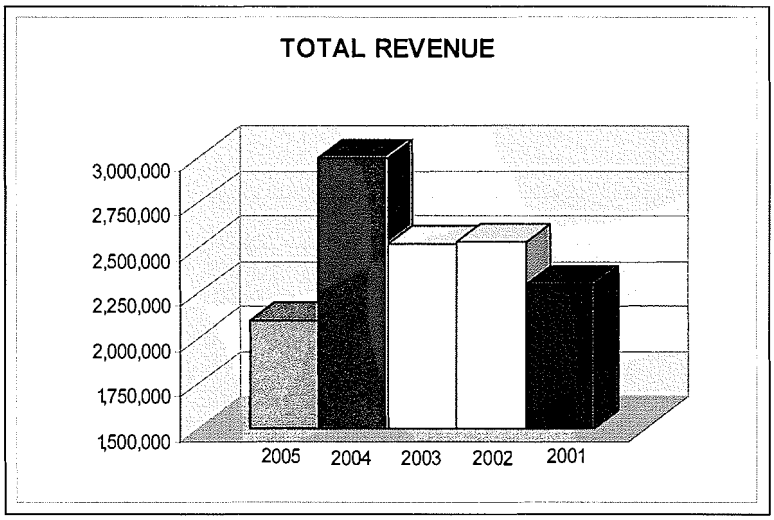
WNMU-TV has been operational as a noncommercial educational television station since 1972. The station serves the central Upper Peninsula of Michigan and eight counties in northeastern Wisconsin with broadcast transmissions for 19.5 hours each day. The station's total estimated audience includes 184,000 households. WNMU-TV is a small station serving a sparse, rural population and is the only noncommercial television facility broadcasting in this region (DMA #180).

The rural isolation of the area is overwhelming: the 22 counties that have access to WNMU-TV's programming span nearly 23,000 square miles (the combined territory of Massachusetts, New Jersey, Rhode Island, Connecticut, and Delaware), yet their total population is only 434,000 (one-eighth of the population of the Boston area). Given the numerous demographic and geographic barriers of the region, K-12 school districts and colleges and universities rely on the station's ability to provide targeted educational and ITV programming to many students throughout the region.

WNMU-TV also plays a critical role in providing primary EAS services to a community where Great Lakes region weather patterns regularly produce an annual snowfall of over 200 inches. The station pioneered NOAA weather broadcasts on its analog facility using the SAP channel and continues to work with NOAA officials as well as state and local emergency personnel to explore ways of using its new digital capabilities to aid first responders, police, fire and other agencies dealing with public safety issues.

Since 2001, a downturn in Michigan's manufacturing economy has resulted in serious economic difficulties for the state. In fact, 24% of the jobs lost nationwide during the last 5 years have occurred in the State of Michigan. As a result, the station's licensee (NMU) has suffered a $7.0 million (13.4%) decrease in state appropriations while at the same time enrolling an additional 943 students (an 11% increase). When first presented with the State of Michigan financial cuts, NMU considered eliminating all of its public service operations – including WNMU-TV – in order to drastically reduce operating expenses. However, after conducting a thorough review, NMU voted unanimously to retain WNMU-TV as an integral part of the University, noting two compelling factors: 1) the potential that digital broadcasting holds for educational content delivery (a direct tie-in with the University's mission); and 2) the committed and sustained financial support of WNMU-TV's viewers. A letter from the Chair of the University's Board of Trustees supporting our recent PTFP application is attached as Exhibit A.

Although NMU opted to preserve WNMU-TV, it did so with a dramatic reduction in funding in 2005. The new base budget allocated to the station represents only 35% of the station's overall budget (University funding prior to 2004 represented 52% of the station's operation funding) and is illustrated in the chart below showing a 5-year summary of station audited revenues.



WNMU-TV's management compensated for these reductions by adjusting annual operating expenses to match revenues (a reduction of 12 full-time staff – nearly 50% of station personnel -- and renegotiated programming costs). Unfortunately, little could be done to reduce the station's DTV conversion costs, except to construct a plan that made the best use of the financial resources available to WNMU-TV/DT in the form of federal grants and private fundraising support.

II. Tailoring WNMU-DT's Operations to Meet Financial Necessity

WNMU's initial DTV construction permit for DTV Channel 33 was granted on July 19, 2001 (Permit File No. BPEDT-20000501AGD). For economic reasons, it specified a DTV site at Morgan Meadows, located 33 kilometers from its analog transmitter site. According to NMU's consulting engineer, John F.X. Browne of John F.X. Browne & Associates, P.C., it is technically impossible to achieve full replication from that site, because of the distance, terrain, and other relevant differences between the two sites. In April 2004, NMU filed a request for Special Temporary Authorization ("STA") specifying an antenna 38 meters lower on the Morgan Meadows existing antenna tower. While that proposal produced a 48 dBu contour that completely encompasses the principal community of Marquette, the reduced antenna height further ensured that even 80% replication would be impossible. Indeed, the current STA facilities provide only about 42% replication. However, the STA was fully consistent with the Commission's rules and with Paragraphs 34 and 35 of *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television (MM Docket No. 00-39)*, 16 FCC Rcd 20594 (2001). It was duly granted, and STA operations commenced on July 12, 2004. (In accordance with *Public Notice, DA 06-1255, supra*, and its poor financial position, NMU has filed a Form 340 modification application – File No. BMPEDT-20060628ACT -- to slightly modify its DTV construction permit, reducing its ERP to 46.7 kW so that it can use a smaller transmitter, and an STA modification application – File No. BDSTA-20060630AGG -- to conform its existing STA with the Form 340 application.)

NMU's decision to construct reduced DTV Channel 33 facilities came from an analysis of engineering data showing that full replication of WNMU-TV's analog Channel 13 coverage at the DTV site would be technically impossible and cost prohibitive due to an exceptional increase in power consumption. With very limited resources as a small rural University-owned station

facing a tremendous financial crisis (see Section I above), unaffordable costs in electrical consumption would have quickly forced WNMU-TV/DT to cease broadcasting.

Stated more generally, NMU's dire financial situation has dramatically deteriorated since 2004, and NMU simply cannot afford at this time either to upgrade its facilities at its current DTV transmitter site or to co-locate those facilities with analog Channel 13 in Ely, something that it plans to do in late 2008. Thus, NMU is seeking a permanent interference protection deadline waiver that will allow WNMU-DT to flash cut to DTV Channel 13 at its analog Channel 13 transmitter site during the 4th quarter of 2008. While the reason for this request is economic, it is based on engineering facts that are related to the region's geography and the populations served.

About 25% of the households served by WNMU-DT are on the outer fringes of the station's analog grade B signal contour. The populations centers of Escanaba, MI, Iron Mountain/ Kingsford, MI and Houghton/Hancock, MI, as well as several smaller communities are not only on the station's fringe, but separated from the transmitter by numerous hills and valleys. According to a study performed by John F.X. Browne (see Exhibit B hereto --"Report on Population" -- and Figures 1-5), 80% replication based on WNMU-TV's 1997 analog coverage on DTV channel 33 at WNMU's authorized analog transmitter site at Ely, Michigan would require a DTV power increase from the present 50 kilowatts (STA facilities) to at least 400 kilowatts for only a two-year period and also a new larger transmitter. While Figure 5 shows that the cities previously mentioned would then be served, the additional equipment and power costs to achieve that result would be prohibitive and completely beyond NMU's financial means.

Thus, in the opinion of WNMU-TV/DT's Board, engineering staff, and consulting engineers, the only viable digital conversion solution for this facility under these circumstances is to make a flash cut from analog to digital broadcasting on DTV channel 13 in late 2008, which is what WNMU-DT specified in its January 25, 2005 FCC Form 382 Digital Channel Election Form. This solution has many advantages including making good use of federal and private digital conversion funds, allowing WNMU-DT to continue serving all viewers currently under its broadcast umbrella, and, most importantly, completing its digital transition in a manner that permits the station to continue serving the public well into the future.

III. Conclusion

Therefore, for all of the foregoing reasons and good cause shown, NMU respectfully requests that the Commission should grant WNMU-DT a permanent waiver of the replication/maximization interference protection compliance deadline through the end of the DTV transition by which time WNMU-DT will be providing full replication of its analog facilities in accordance with its November 4, 2004 FCC Form 381 Pre-Election Certification.

Please direct any communications or correspondence concerning this matter to the undersigned.

Sincerely

Jerold L. Jacobs
Counsel for Board of Trustees of
Northern Michigan University

Enclosures
cc: Shaun Maher, Esq. (FCC - via e-mail – w/encls.)

EXHIBIT A

Northern Michigan University

Board of Trustees
1401 Presque Isle Avenue
Marquette, MI 49855-5301
906-227-2555
FAX: 906-227-2565
Web site: www.nmu.edu

February 3, 2006

Mr. Eric L. Smith
General Manger WNMU-TV/FM
Northern Michigan University
1401 Presque Isle Ave.
Marquette, MI 49855

Dear Mr. Smith,

This letter is to confirm the action taken by Northern Michigan University's Board of Trustees on October 6, 2005 when members of the Board voiced their unanimous support to continue base budget funding for station operations at WNMU-TV. The Board's lengthy review of this station's contribution to the academic and cultural missions of Northern Michigan University has confirmed its importance to NMU and the community we serve.

Michigan's economy has suffered tremendously over the last four years and the result has been dramatic reductions in a number of university operations. As the Board grapples with continued reductions in State appropriations, we appreciate the way station management and staff members have worked to continue providing broadcasting services with fewer resources. Based on presently known information, it is our opinion that the financial plan submitted by the University administration for long-term station operations is sound given the new emphasis you are placing on increasing major gift contributions and continued efficiencies in station operations.

The Board fully supports WNMU-TV's continued transition to digital broadcasting and understands that our ability to complete this transition depends on the receipt of grant funding designed to assist stations like ours with this process.

We wish WNMU-TV success as you move forward with this very important project.

Sincerely,

Karl A. Weber

Karl A. Weber, Chair
Board of Trustees

KAW:prg

EXHIBIT B

Report on Population
WNMU-DT
Marquette, MI

Background

The Board of Trustees of Northern Michigan University (NMU) holds a license for WNMU-TV, CH 13 in Marquette, MI (BLET-328, Facility ID# 4318) and also has a Construction Permit for WNMU-DT, CH33 in Marquette, MI (BPEDT-20000501AGD, Facility ID# 4318). In addition, it has Special Temporary Authority to operate WNMU-DT with lesser facilities (BDSTA-20040430AGY, Facility ID# 4318) than authorized in the CP.

Facilities

WNMU-TV operates with an ERP of 316 kW on CH13 at an HAAT of 332m (778m AMSL) from a tower (ASRN 1023010) located in Ely, MI. This location is 42.5 km from the city of license, Marquette, MI. As can be seen in Figure 1, the 77 dBu F(50,50) contour from this facility completely encompasses the city of Marquette, MI. The population inside the 56 dBu F(50,50) contour, as reported in Table II of the Commission's Public Notice DA 04-3922, dated December 21, 2004, is 168,009.

NMU holds a Construction Permit for WNMU-DT, CH33 in Marquette, MI. This facility has an ERP of 50 kW at an HAAT of 171m (507m AMSL) from a tower (ASRN 1227573) located at Morgan Meadows, 7.8 km from Marquette, MI. As shown in Figure 2, the 48 dBu F(50,90) contour completely encompasses the city of Marquette, MI. The population inside the 41 dBu F(50,90) contour is predicted to be 72,370.

NMU also holds a Special Temporary Authority for a digital facility, also located at Morgan Meadows, operating with an ERP of 50 kW at an HAAT of 133m (468.7m AMSL).

The 48 dBu F(50,90) contour of this facility encompasses the city of Marquette as can be seen in Figure 3. The population inside the 41dBu F(50,90) contour is predicted to be 70,335.

Severe Financial Constraints

NMU realized early-on that the allotment facility (740 kW ERP on CH33 from Ely) would cause a financial hardship. It certified to the replication coverage but elected CH13 in order to have lower operating costs. The population reported inside the 41 dBu F(50,90) contour of the allotment facility, as reported in Table II of the Commission's Public Notice DA-04-3922, dated December 21, 2004, is 184,105 people.

Because of severe financial constraints NMU was unable to build the tower that was planned for the facility authorized in the construction permit at Morgan Meadows. Instead, the STA facility was constructed on an existing tower at Morgan Meadows.

As can be seen from the accompanying Figures 1-3, the predicted population within the 41 dBu F(50,90) contour of the STA facility and that of the authorized Construction permit fall short of the 80% (134,407 persons) required by the FCC to meet the "use-it-or-lose-it" requirement.

Building a CH33 DTV facility at Ely would seem to be a logical choice for meeting the population requirements because the tower is much higher. However, space allocations on the tower would require that the DTV antenna be placed at a maximum height of 250m AGL. Figure 4 shows the coverage of such a facility from Ely, MI, which would encompass a predicted population of 72,611. This also falls short of the required 134,407 people. There are three major population centers that would be covered by the 740 kW allotment facility; Houghton, Marquette and Escanaba. Most of the area that is not associated with these population centers is forest/wilderness where the population is sparse. It would take an ERP of at least 400 kW from the Ely site at a RCAGL of 250m to cover the 80% population (134,930 persons for 400 kW at 250m RCAGL). This would impose a financial burden that approaches the operating cost of a 740 kW, CH33 facility. There would also be the

tremendous capital expense of acquiring and installing a new CH33 high power transmitter and antenna, which would only be used for little more than two years until the transition when NMU returns to DTV operation on CH13.

Conclusion

There appears to be no practical way for NMU to cover 80% of the population before it returns to CH13 because of financial constraints. NMU wishes to continue to provide the only Public TV services to the population of Michigan's Upper Peninsula, as it has since 1972, but must seek a hardship waiver of the 80% requirement. At the end of the transition, NMU will be broadcasting on CH13 from Ely, MI with an ERP that will replicate the coverage of the 740 kW UHF allotment facility.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

John F.X. Browne

June 26, 2006

John F.X. Browne & Associates P.C.

WNMU-TV Licensed Coverage

WNMU-TV
BLET328
Latitude: 46-21-09 N
Longitude: 087-51-32 W
ERP: 316.00 kW
Channel: 13Z
Frequency: 213.0 MHz
AMSL Height: 778.0 m
Horiz. Pattern: Omni

56.0 dBu

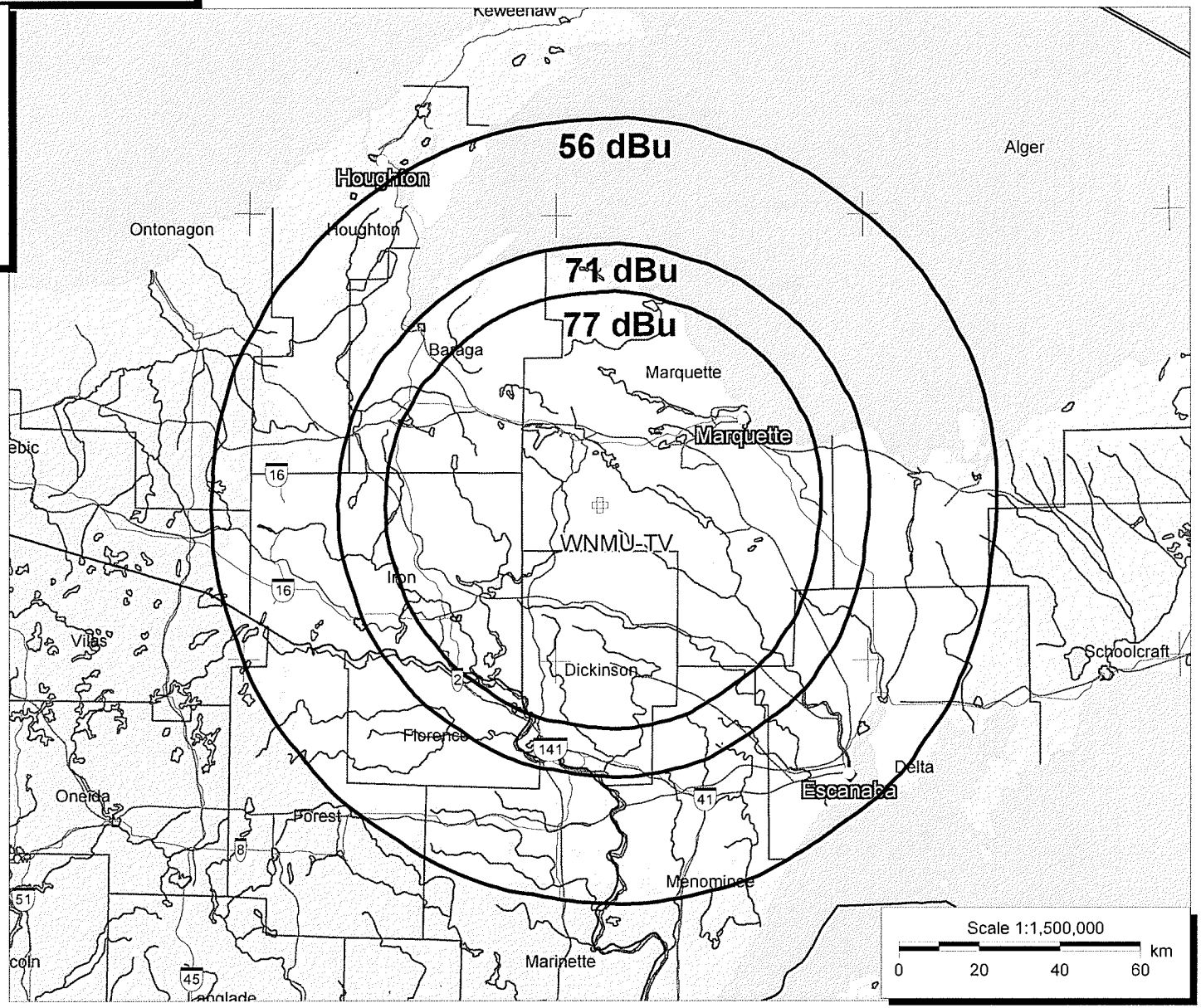


FIG.1

John F.X. Browne & Associates P.C.

WNMU-DT Construction Permit Coverage

WNMU-DT
BPEDT20000501AGD
Latitude: 46-30-52 N
Longitude: 087-29-07 W
ERP: 50.00 kW
Channel: 33
Frequency: 587.0 MHz
AMSL Height: 507.0 m
Horiz. Pattern: Omni

41.0 dBu

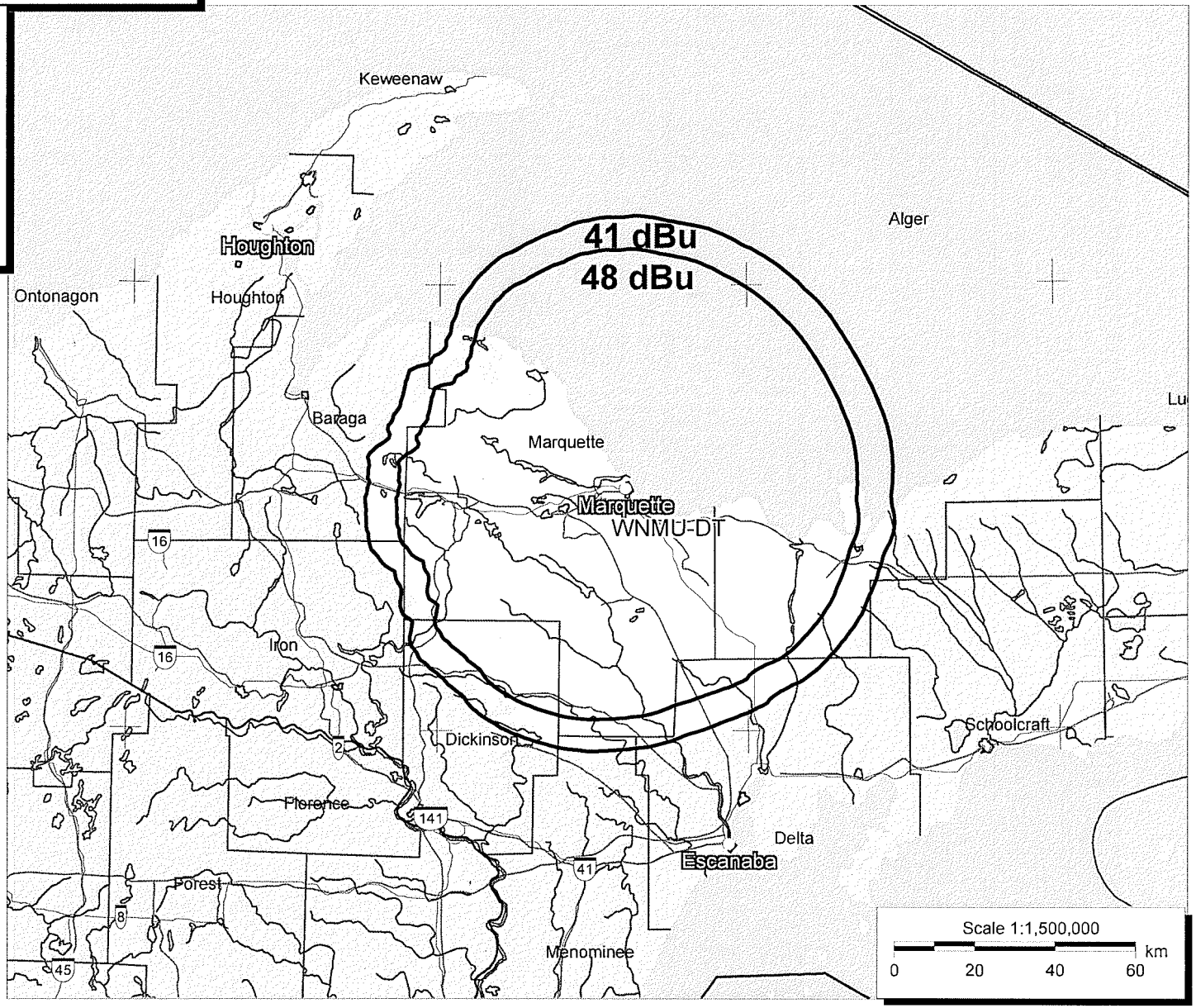


FIG. 2

John F.X. Browne & Associates P.C.

WNMU-DT STA Coverage

WNMU-DT STA
BDSTA20040430AGY
Latitude: 46-30-52 N
Longitude: 087-29-07 W
ERP: 50.00 kW
Channel: 33
Frequency: 587.0 MHz
AMSL Height: 468.0 m
Horiz. Pattern: Omni

☐ 41.0 dBu

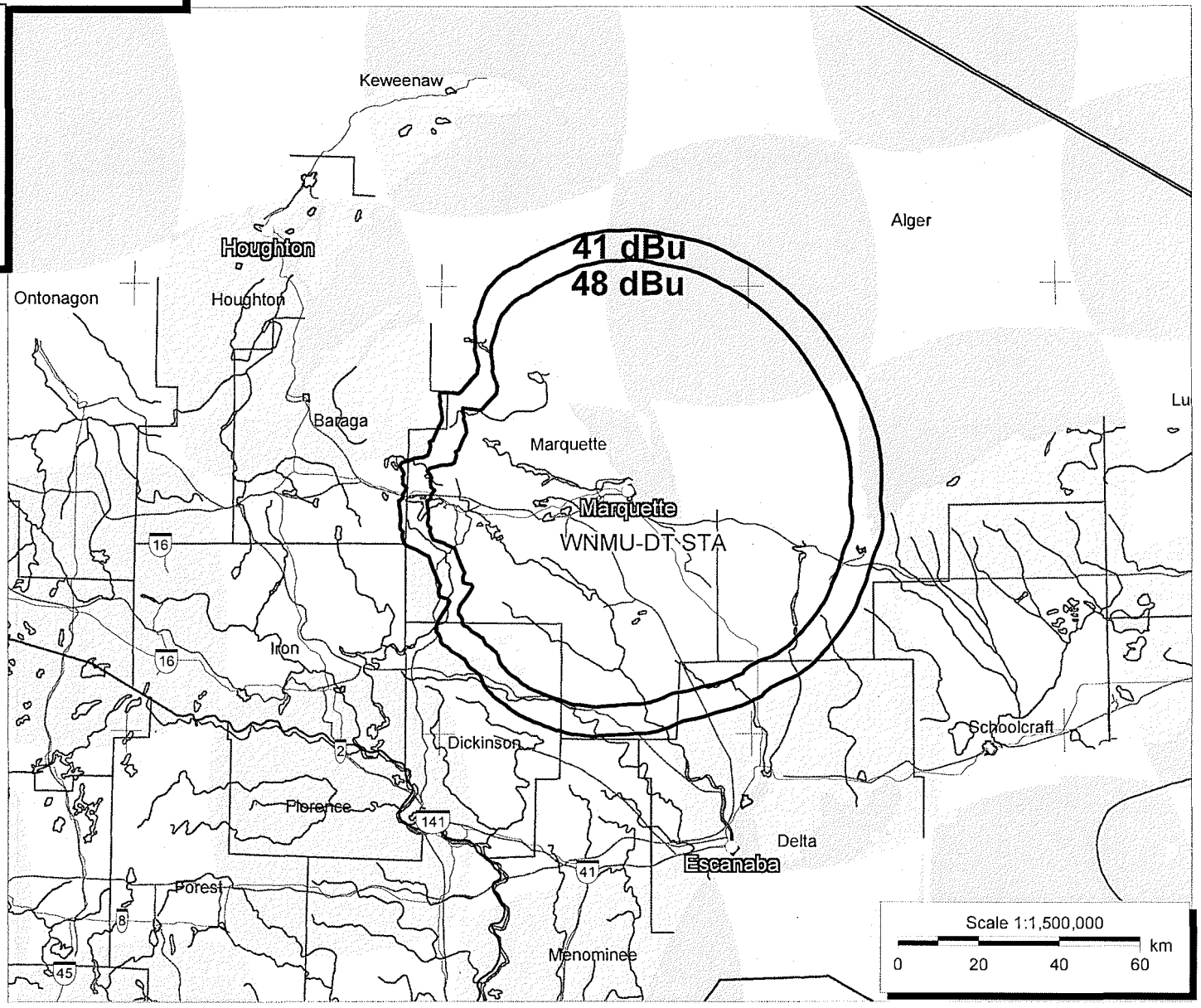


FIG. 3

John F.X. Browne & Associates P.C.

WMNU-DT Coverage from Ely with Omni Antenna
CH 33 50 kW at 250 meters AGL

WNMU-DT
Latitude: 46-21-09 N
Longitude: 087-51-32 W
ERP 50.00 kW
Channel: 33
Frequency: 587.0 MHz
AMSL Height: 707.0 m
Horiz. Pattern: Omni

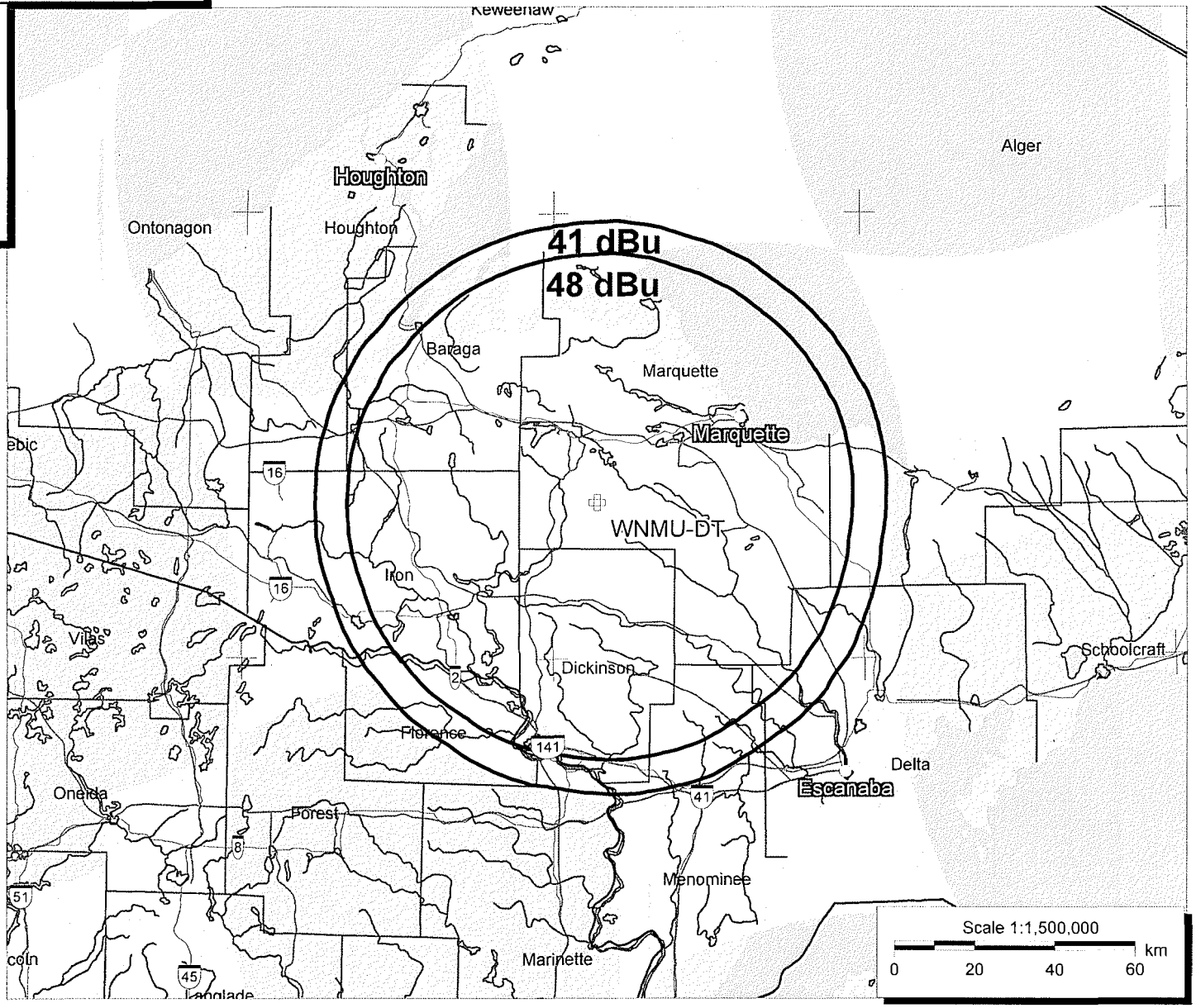


Fig. 4

John F.X. Browne & Associates P.C.

WMNU-DT Coverage from Ely with Omni Antenna
CH 33 400 kW at 250 meters AGL

WNMU-DT
Latitude: 46-21-09 N
Longitude: 087-51-32 W
ERP: 400.00 kW
Channel: 33
Frequency: 587.0 MHz
AMSL Height: 707.0 m
Horiz. Pattern: Omni

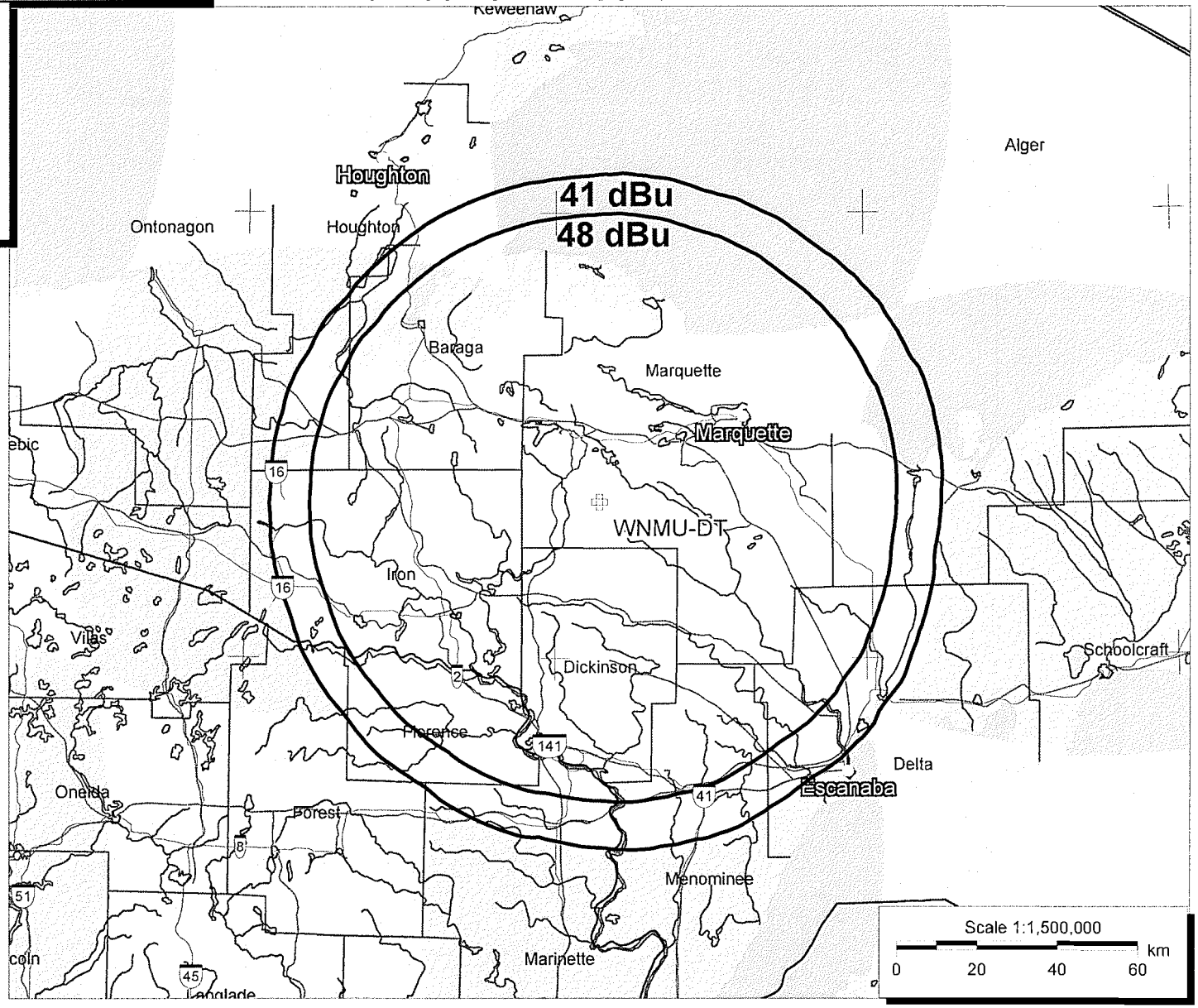


FIG. 5